Singhurst, J.R., J. Keesling, and W.C. Holmes. 2015. *Centaurium tenuiflorum* (Gentianaceae) new to Arkansas. Phytoneuron 2015-55: 1–2. Published 20 October 2015. ISSN 2153 733X

CENTAURIUM TENUIFLORUM (GENTIANACEAE) NEW TO ARKANSAS

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ABSTRACT

Centaurium tenuiflorum, a native of Europe, is reported for the first time as naturalized in Arkansas. The species is known to be naturalized in the nearby states of Texas, Oklahoma, Louisiana, and Mississippi as well as in California and Oregon.

Based on the following specimens collected in southern Arkansas, we report *Centaurium tenuiflorum* (Hoffmanns. & Link) Fritsch ex Janch., Figure 1, (Gentianaceae) as new to the spontaneous flora of that state.

Arkansas. Miller Co.: E side of Hwy 49, 0.4 mi S of jct with Arkansas Blvd, slope right-of-way, near Texarkana Airport (33° 27' 15.93" N, 94° 0' 34.36" W), 20 May 2015, *Singhurst 20995* (BAYLU). Saline Co.: N side of I-30, 0.8 mi W of jct with Hwy 67, right-of-way along access road, W side of the weigh station lane (34° 32' 30.34" N, 92° 38' 37.82" W), 27 May 2015, *Keesling* 54 (ANHC); W side of Hill Farm Road 0.8 mi from jct with South Reynolds Road and across from Central Arkansas Flying Club Airport (34° 35' 15.12" N, 92° 29' 10.52" W), 6 Jul 2015, *Keesling* 70 (ANHC).

The *Centaurium tenuiflorum* population in Miller County consisted of several hundred individuals at the base of a slope of an infrequently mowed right-of-way. Associated flora included *Cynodon dactylon*, *Diodia teres*, *Erigeron strigosus*, *Hordeum* sp., *Juncus marginatus*, *Oenothera speciosa*, *Medicago* sp., *Plantago aristata*, *Trifolium* spp., and *Verbena halei*. The first Saline County population (*Keesling 54*) included about 20 individuals in a disturbed right-of-way with *Daucus carota*, *Oenothera linifolia*, *Plantago aristata*, *Trifolium arvense*, *Verbena incompta*, and *Verbena halei*. Aside from *C. tenuiflorum*, the second Saline County location (*Keesling 70*) was characterized by *Coreopsis* sp., *Krigia caespitosa*, *Kummerowia striata*, *Plantago aristata*, and *Paspalum notatum*.

Centaurium tenuiflorum was reported in Texas, Louisiana, and Mississippi (Holmes & Wivagg 1996) under the name *Centaurium muehlenbergii* (Griseb.) W. Wright ex Piper. Use of this name was based upon Hickman (1993), where *C. tenuiflorum* is listed as a synonym of *C. muehlenbergii*. However, Pringle (2010) has identified *C. muhlenbergii* as being *Zeltnera muehlenbergii* (Griseb.) G. Mansion, a North American species native from southern California to southwestern British Columbia.

Centaurium tenuiflorum is native to western and southern Europe. It has been naturalized in California and Oregon and in Texas, Oklahoma, Louisiana, and Mississippi (summarized by Mink et

al. 2011). The species tends to be "weedy," occurring in pastures, waste places, disturbed areas, and roadsides. It has been confused with *Zeltnera texense* (Griseb.) G. Mansion, especially in Texas, but may be distinguished by its habitat preference (weedy areas), robust size (generally 30 cm or taller), flat-topped corymb, and more or less sessile flowers. *Zeltnera texense* normally occurs on eroded limestone, has a more open and paniculate inflorescence, is normally less than 20 cm tall (but occasionally up to 30 cm), and has pedicels that are about the same length as the calyces.

Fig. 1. *Centaurium tenuiflorum* from Saline Co., Arkansas. Photo by Jim Keesling, 27 May 2015.

ACKNOWLEDGEMENTS

The authors are grateful to Theo Witsell, Senior Botanist/Ecologist with the Arkansas Natural Heritage Commission, for his suggestions and review of this manuscript.

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